IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Inventor: CAHILL et al. Confirmation No. 6456

Serial No. 10/511,205 Examiner: S. AEDER

Filed: February 15, 2005 Art Unit: 1642

Title: **USE OF SUBSTANCES FOR TREATING TUMORS**

DECLARATION UNDER 37 C.F.R. 1.132

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

NOW COME the undersigned and declare that:

1.1 I, Michael Cahill, reside at Weinbergstr. 34, Loerzweiler, Germany, am a citizen of Australia.

1.2 I am the inventor of the subject matter of the present U.S. Patent Application, namely, U.S. Patent Application Serial No. 10/511,205.

1.3 I am a scientist.

1.4 I have studied biochemistry.

2.1 I have intensively studied the Official Action dated July 13, 2007. Specifically, I have studied the Examiner's rejection on page 7 of the Office Action of claim 52 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In order to show that the sialic acid synthase and KNP1 have diagnostic potential for prostatic cancer as presently claimed were described in such a way as to enable one skilled in the

art to which the subject matter pertains, or with which it is most nearly connected, to make and/or use the invention in connection with the claimed method of diagnosing disorders. I hereby provide the Examiner with results from the corresponding experiments (see attached file with gel images) using a differential quantitative proteomic procedure which has later been published (see e.g. Poznanovic S, Wozny W, Schwall G, Sastri C, Hunzinger C, Stegmann W, Schrattenholz A, Buchner A, Gangnus R, Burgemeister R, Cahill MA (2005) Differential radioactive proteomic analysis of microdissected renal cell carcinoma tissue by 54 cm isoelectric focusing in serial immobilized pH gradient gels. Journal of Proteome Research 4(6), 2117-2125).

These experiments were carried out in May and June of 2002.

2.2 This data were conducted under my supervision and guidance.

3.1 The dual isotope differential labeling of prostate cancer and benign prostate tissue allows a reliable and quantitative detection of differential (thus cancer-associated) proteins, which are subsequently identified from preparative 2D-gels by mass spectrometry (see attached file). The underlying experimental strategy and the statistical treatment of potential biomarkers like

the ones named in the present application have been broadly published recently:

- Groebe K, Krause F, Kunstmann B, Unterluggauer H, Sastri C, Stegmann W, Wozny W, Schwall GP, Poznanović S, Dencher NA, Jansen-Dürr P, Osiewacz HD and Schrattenholz A (2007) Differential proteomic profiling of mitochondrial preparations from *Podospora anserina*, rat and human reveals distinct patterns of age-related oxidative changes, Exp. Gerontology, 42, 887-898.

- Schrattenholz A and Groebe K (2007) What does it need to be a biomarker? Relationships between resolution, differential quantification and statistical validation of protein surrogate biomarkers. Electrophoresis, 28(12), 1970-1979.

- Wozny W, Schroer K, Schwall GP, Poznanović S, Stegmann W, Dietz K, Rogatsch H, Schaefer G, Huebl H, Klocker H, Schrattenholz A, Cahill MA (2007) Differential radioactive quantification of protein abundance ratios between benign and malignant prostate tissues: cancer association of annexin A3. Proteomics, 7(2), 313-322.

- Neubauer H, Clare SE, Kurek R, Wallwiener D, Sotlar K , Nordheim A, Wozny W, Schwall G, Poznanović S, Sastri C, Hunzinger C, Stegmann W, Schrattenholz A, Cahill MA (2006) Breast cancer proteomics by 54 cm daisy chain IPG-IEF 2D-PAGE, differential radioactive detection, sample pooling, and laser capture microdissection. Electrophoresis, 27(9), 1840-1852.

- Poznanovic S, Wozny W, Schwall G, Sastri C, Hunzinger C, Stegmann W, Schrattenholz A, Buchner A, Gangnus R, Burgemeister R, Cahill MA (2005) Differential radioactive proteomic analysis of microdissected renal cell carcinoma tissue by 54 cm isoelectric focusing in serial immobilized pH gradient gels. Journal of Proteome Research 4(6), 2117-2125.

3.2 Therefore, it is clear that one of skill in the art, using the teachings of the specification would be able to use the claimed methods for diagnosis of prostatic cancer.

4.1 All statements made herein of my own knowledge are true. All statements made herein upon information and belief is believed to be true. I understand that willful false statements and the like are punishable by fine or

imprisonment, or both, under the provisions of 18 U.S.C. 1001, and may jeopardize the validity of the application or any parent issuing thereon.

4.2 Further, declarant sayeth naught.

4.3 WITNESS my signature below on the indicated date.

January 4th, 2008

Date

Declarant: Michael Cahill